

888888888888 0000000000 0000000000 TTTTTTTTTTTTTTTTT
888888888888 0000000000 0000000000 TTTTTTTTTTTTTTTTT
888888888888 0000000000 0000000000 TTTTTTTTTTTTTTTTT
888 888 000 000 000 000 000 TTT SSS
888 888 000 000 000 000 000 TTT SSS
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888 888 000 000 000 000 000 TTT SSS
888 888 000 000 000 000 000 TTT SSS
888 888 000 000 000 000 000 TTT SSS
888888888888 000 000 000 000 000 TTT SSSSSSSSS
888888888888 000 000 000 000 000 TTT SSSSSSSSS
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888 888 000 000 000 000 000 TTT SSS
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888 888 000 000 000 000 000 TTT SSS
888888888888 0000000000 0000000000 TTT SSSSSSSSSSSSS
888888888888 0000000000 0000000000 TTT SSSSSSSSSSSSS
888888888888 0000000000 0000000000 TTT SSSSSSSSSSSSS

FILEID**LOCKDATA

K 16

LL	000000	CCCCCCCC	KK	KK	DDDDDDDD	AAAAAA	TTTTTTTT	AAAAAA
LL	000000	CCCCCCCC	KK	KK	DDDDDDDD	AAAAAA	TTTTTTTT	AAAAAA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LL	00	00	CC	KK	DD	AA	TT	AA
LLLLLLLLLL	000000	CCCCCCCC	KK	KK	DDDDDDDD	AAAAAAA	TTT	AAAAAAA
LLLLLLLLLL	000000	CCCCCCCC	KK	KK	DDDDDDDD	AAAAAAA	TTT	AAAAAAA

LL	IIIIII	SSSSSS
LL	IIIIII	SSSSSS
LL	II	SS
LLLLLLLLLL	IIIIII	SSSSSS
LLLLLLLLLL	IIIIII	SSSSSS

(2) 81 BOOSLOCK_GEN - Lock SYSGEN database
(3) 144 BOOSUNLOCK_GEN - Unlock SYSGEN database

```
0000 1 .IF NDF,STASH
0000 2 .TITLE LOCKDATA - Routines to lock/unlock SYSGEN database
0000 3 .IFF
0000 4 .TITLE STALOCK - Dummy routines for STASYSGEN
0000 5 .ENDC
0000 6 .IDENT 'V04-000'
0000 7 .
0000 8 ****
0000 9 *
0000 10 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 21 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
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0000 24 *
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0000 26 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 27 *
0000 28 *
0000 29 ****
0000 30 *
0000 31 ++
0000 32 *
0000 33 : Facility: System generation and initialization
0000 34 :
0000 35 : Abstract: LOCKDATA provides subroutines which allow synchronization of
0000 36 : access to the SYSGEN device database.
0000 37 :
0000 38 : Environment:
0000 39 :
0000 40 : Author: Maryann Hinden, Creation date: 08-June-1983
0000 41 :
0000 42 : Modification History:
0000 43 :
0000 44 : V03-002 WHM0001 Bill Matthews 29-Feb-1984
0000 45 : Enable queueing of the SYSGEN database lock request.
0000 46 :
0000 47 : V03-001 MSH0001 Maryann Hinden 13-Jul-1983
0000 48 : Use general addressing mode for EXESGL_SYSID_LOCK.
0000 49 :--
0000 50 :
0000 51 :
0000 52 : Include files:
0000 53 :
0000 54 : SLCKDEF : Define lock manager symbols
0000 55 : SSSDEF : Define system status values
0000 56 : $YSGMSGDEF : Sysgen messages
0000 57 :
```

0000 58 : Equated Symbols:
0000 59 :
0000 60 :
00000002 0000 61 LOCK_EFN = 2 ; Event flag number used for lock request
00000018 0000 62 LOCK_FLAGS = LCK\$M_SYNCSTS!- ; Flags specified for lock request
0000 63 LCK\$M_SYSTEM
0000 64
00000000 0000 65 .PSECT PAGED_DATA NOEXE
0000 66 :
0000 67 : Data for SYSGEN database lock
0000 68 :
0000 69 B00\$GB_RESDESC:: ; Descriptor for resource name
0000 70 .ASCID /SYSGENS_DATABASE/
0018 71
00000090 0018 72 B00\$LOCK_STATUS:: ; LOCK_STATUS and LOCK_ID form
00000090 0018 73 .LONG 0 ; the Lock status block for the
001C 74 B00\$LOCK_ID:: ; lock request
00000000 001C 75 .LONG 0
0020 76
00000000 77 .PSECT PAGED_CODE NOWRT

- Routines to lock/unlock SYSGEN databases 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00
C 1
4-SEP-1984 23:04:48 [800TS.SRC]LOCKDATA.MAR;1 Page 3
(1)

0000 79

```

0000  81      .SB1TL BC0$LOCK_GEN - Lock SYSGEN database
0000  82      :++
0000  83      : Functional description
0000  84      : Lock the SYSGEN database for create/modify, in order to
0000  85      : synchronize I/O database building. Used by LOAD, RELOAD,
0000  86      : AUTOCONFIGURE, CONNECT.
0000  87      :
0000  88      : This routine attempts to acquire an exclusive mode system lock on
0000  89      : the SYSGENS_DATABASE resource in executive mode. So that this resource
0000  90      : is only specific to the local system, rather than a cluster, the $ENQ
0000  91      : request specifies a parent (resource) which identifies the system on
0000  92      : which the request is being made.
0000  93      :
0000  94      : The $ENQ entry point is used, so that if the resource is not
0000  95      : available immediately, the process will wait, with the assumption being
0000  96      : that it will get the resource soon. An event flag number is specified
0000  97      : to avoid possible interference with CONFIGURE.
0000  98      :
0000  99      : An alternate version of this routine (STALOCK) is provided in
0000 100     : which the calls to the entry points simply return a success status.
0000 101     : This is provided for use by STASYSGEN which runs standalone, and
0000 102     : therefore no locking is necessary.
0000 103     :
0000 104     : Calling sequence
0000 105     : J$B/BSBx BC0$LOCK_GEN
0000 106     :
0000 107     : Inputs
0000 108     : NONE
0000 109     :
0000 110     : Outputs
0000 111     : R0 - If LBS, locked database
0000 112     : LBC, then no current access to database (SYSGS_NOLOCK)
0000 113     :--
0000 114     :
0000 115     : BC0$LOCK_GEN::
0000 116     :
0000 117     : IF      NDF, STASW
0000 118     : $CMEXEC_S LOCK
0000 119     : RSB
0000 120     :
05   0004 0010 121 LOCK: .WORD  ^M<R2>
0000 122     : MOVL  G^EXESGL_SYSID_LOCK,R0
0000 123     : SENQW_S efn    = #LOCR_EFN,-
0000 124     :           lkmode = #LCKSR_EXMODE,-
0000 125     :           lksb  = BC0$LOCK_STATUS,-
0000 126     :           flags = #LOCK_FLAGS,-
0000 127     :           resnam = BC0$GB_RESDESC,-
0000 128     :           parid = R0
0000 129     :
0000 130     : BLBC  R0,10$           ; If LBC, error
0000 131     : MOVZWL BC0$LOCK_STATUS,R0
0000 132     : BLBC  R0,10$           ; Get final status
0000 133     : RET
0000 134     : RET
0000 135     : 10$: MOVL  #SYSGS_NOLOCK,R0
0000 136     :           ; Success?
0000 137     :           ; Yes
0000 138     :           ; Indicate error
0000 139     : .IFF
50   00000000'GF 0004 0010
50   00000018'EF 08 50 E9 003A
50   01 50 E9 003D 0044 0047 0048 004F 0050 0050 0050
50   007C812A 8F 0047 0048 10$: 004F 134 135 136 137

```

- Routines to lock/unlock SYSGEN databases 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00
BOOTSLOCK_GEN - Lock SYSGEN database 4-SEP-1984 23:04:48 [BOOTS.SRC]LOCKDATA.MAR;1

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(2)

0050 138 MOVZWL #SSS_NORMAL, R0 ; Force success
0050 139 RSB
0050 140
0050 141 .ENDC
0050 142

0050 144 .SBTTL BOOSUNLOCK_GEN - Unlock SYSGEN database
0050 145 ++
0050 146 Functional description
0050 147 Dequeue the lock requested by BOOSLOCK_GEN.
0050 148
0050 149 Calling sequence
0050 150 JSB/BSBx BOOSUNLOCK_GEN
0050 151
0050 152 Input
0050 153 Lock id in lock status block (implicit).
0050 154
0050 155 Output
0050 156 R0 - If LBS, successful completion
0050 157 LBC, error on dequeue (probably serious) - status SYSGS_DEQERR.
0050 158 ;--
0050 159
0050 160 BOOSUNLOCK_GEN:::
0050 161
0050 162 .IF NDF,STASW
0050 163
0050 164 SCMEXEC_S UNLOCK : Change mode to access lock
05 005F 165 RSB : Return
0060 166
0000 0060 167 UNLOCK: WORD 0 : Null entry mask
007C 07 50 E8 0073 0062 168 \$DEQ_S lkid = BOOSLOCK_ID : Dequeue lock
007C 0073 0076 007D 007E 169 BLBS R0,10\$: If LBS, all okay
007C 007D 007E 170 MOVL #SYSGS_DEQERR,R0 : Indicate error
007C 007E 171 10\$: RET
007C 007E 172
007C 007E 173 .IFF
007C 007E 174
007C 007E 175 MOVZWL #SSS_NORMAL,R0 : Force success
007C 007E 176 RSB
007C 007E 177
007C 007E 178 .ENDC
007C 007E 179 .END

LOCKDATA
Symbol table

G 1
 - Routines to lock/unlock SYSGEN databases 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00
 4-SEP-1984 23:04:48 [800TS.SRC]LOCKDATA.MAR;1

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(3)

```

$ST1          = 00000001
BOOSGB RESDSC
BOOSLOCK_GEN
BOOSLOCK_ID
BOOSLOCK_STATUS
BOOSUNLOCK_GEN
EXESGL SYSID_LOCK
LCKSK_EXMODE
LCKSM_SYNCSTS
LCKSM_SYSTEM
LOCK
LOCK_EFN
LOCK_FLAGS
SYSSCPMEXEC
SYSSDEQ
SYSENOW
SYSGS_DEQERR
SYSGS_NOLOCK
UNLOCKR      = 00000005
              = 00000008
              = 00000010
              = 00000010 P 03
              = 00000002
              = 00000018
              = 00000018 GX 03
              = 00000018 GX 03
              = 00000018 GX 03
              = 007C8122
              = 007C812A
              = 00000060 P 03

```

-----+
 ! Psect synopsis !
 -----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000000	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
PAGED_DATA	00000020	02 (2.)	NOPIC USR CON RE_ LCL NOSHR NOEXE RD WRT NOVEC BYTE
PAGED_CODE	0000007E	03 (3.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE

-----+
 ! Performance indicators !
 -----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.08	00:00:00.37
Command processing	138	00:00:00.63	00:00:04.01
Pass 1	225	00:00:05.30	00:00:10.92
Symbol table sort	0	00:00:00.77	00:00:01.17
Pass 2	48	00:00:00.94	00:00:01.78
Symbol table output	4	00:00:00.04	00:00:00.04
Psect synopsis output	1	00:00:00.02	00:00:00.13
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	454	00:00:07.79	00:00:18.43

The working set limit was 1200 pages.

26796 bytes (53 pages) of virtual memory were used to buffer the intermediate code.

There were 30 pages of symbol table space allocated to hold 514 non-local and 2 local symbols.

179 source lines were read in Pass 1, producing 15 object records in Pass 2.

17 pages of virtual memory were used to define 16 macros.

-----+
! Macro library statistics !
-----+

Macro library name

-\$255\$DUA28:[B0OTS.CBJ]B0OTS.MLB:1
-\$255\$DUA28:[SYS.OBJ]LIB.MLB:1
-\$255\$DUA28:[SYSLIB]STARLET.MLB:2
TOTALS (all libraries)

Macros defined

0
1
12
13

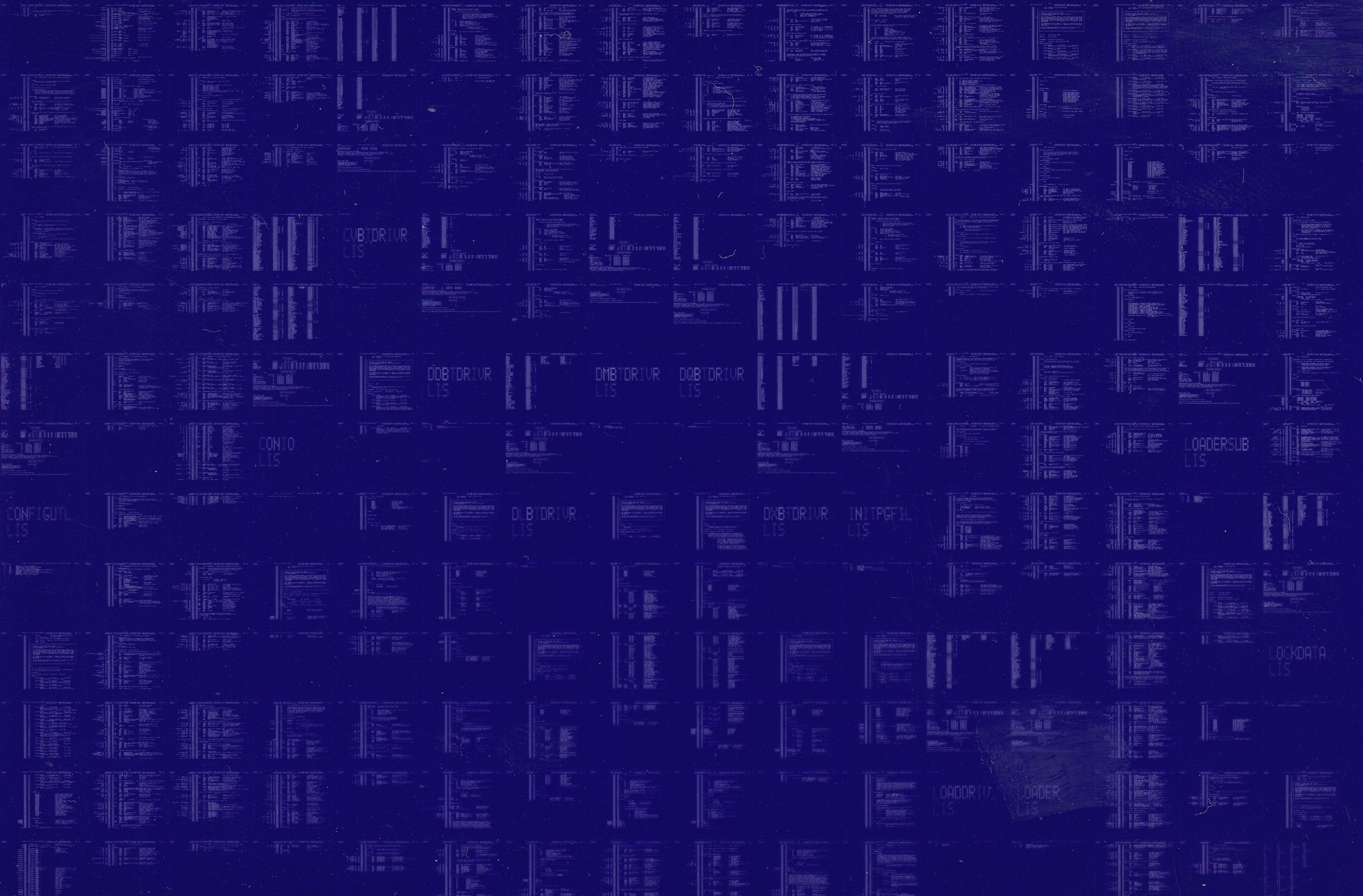
649 GETS were required to define 13 macros.

There were no errors, warnings or information messages.

MACRO/L!\$=LISS:LOCKDATA/CBJ=OBJ\$:LOCKDATA MSRC\$:LOCKDATA/UPDATE=(ENH\$:LOCKDATA)+EXECMLS/LIB+LIB\$:B0OTS.MLB/LIB

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